

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

TITLE V GENERAL PERMIT NO. G-02-002
LANDFILL GAS TO ENERGY PROJECTS

SOURCE DESCRIPTION:

This General Permit is being written to include all Title V Major Source Landfill Gas to Energy Projects in the Commonwealth of Kentucky. A general permit was chosen because of the vast similarities between these projects, the relatively few applicable requirements for any given location, and the ease with which revisions and renewals can be made to the permit itself.

Landfill Gas to Energy Projects, for the purposes of this General Permit, receive landfill gas as fuel for internal combustion electric generating engines. These combustion engines, when in operation, act similar to flares as control devices.

COMMENTS:

- I. Type of control and efficiency
Landfill Gas to Energy Projects are regulated by 40 CFR 60 Subpart WWW. The internal combustion engines operate as enclosed combustor type controls as described in Subpart WWW. The engines must achieve 98 weight-percent reduction of nonmethane organic compounds or reduce outlet nonmethane organic compounds to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen.
- II. Emission factors
Emission factors were obtained from internal combustion engine manufacturers and from AP-42.
- III. Applicable regulations
40 CFR 60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills
- IV. Periodic Monitoring
EPA Region 4 has approved an alternative monitoring plan to replace the combustion temperature monitoring required by Subpart WWW.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.